Notice of Allowability	Application No.	Applicant(s)	
	10/526,128	NEVERMANN ET AL.	
	Examiner	Art Unit	
	Charles I. Boyer	1751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *applicants' preliminary amendment received February 28, 2005*.

2. ☒ The allowed claim(s) is/are *1,2,5-15 and 17-23*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☒ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 9/2/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *1/8/07* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

CHARLES BOYER
PRIMARY EXAMINER

Charl Boyer

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Michael Beckett on December 28, 2006.

The application has been amended as follows:

Delete claim 1 and insert new claim 1 as follows:

--A method for the control and inactivation of pathogenic germs on surfaces and instruments of medical and technical establishments comprising the step of contacting the surface or instrument with a disinfectant composition comprising:

an effective microbicidal and antiviral combination of

A) at least one acid selected from the group consisting of aromatic monohydroxycarboxylic acids, dihydroxybenzoic acids, trihydroxybenzoic acids and mixtures thereof,

B) phenols; and

C) one or more surfactants selected from the group consisting of

i) an anionic surfactant selected from the group consisting of alkyl sulfonates, alkyl aryl sulfonic acid, alkyl aryl sulfonates, alkyl aryl ether sulfates with 1 to 3 EO groups, alkyl ether sulfates with 1 to 3 EO groups, their sodium, potassium, and ammonium salts with primary or branched chains having a length of C_8 to C_{18} and mixtures thereof; and

ii) a nonionic surfactant selected from the group consisting of alkyl polyethyleneglycol ethers with 3 to 11 EO groups and mixtures thereof ,

wherein the weight ratio of component (C) to components (B + A) is between 1 : 9 and 9 : 1, and their sum is between 10 and 60 %, referring to the total weight of the concentrated disinfectant formula.—

Delete claim 2 and insert new claim 2 as follows:

--The method according to claim 1, wherein the disinfectant composition further comprises at least one component selected from the group consisting of:

i) a hydrotropic agent selected from the group consisting of butyl monoglycol sulfate, cumenesulfonate, toluenesulfonate, xylenesulfonate, their sodium, potassium, or ammonium salts thereof, and mixtures thereof;

ii) a solvent selected from the group consisting of aliphatic alcohols, glycols having a chain length of C.sub.2 to C.sub.12, or mixtures thereof; and

iii) a pH regulator selected from the group consisting of aliphatic carboxylic acids, hydroxycarboxylic acids having a chain length of C.sub.1 to C.sub.6, or mixtures thereof.--

cancel claims 3 and 4

Delete claims 5-22 and insert new claims 5-22 as follows:

5. The method according to claim 2 wherein the weight of the hydrotropic agents and their salts, individually or in their mixture, is between 5 and 40 % by weight, referring to the total weight of the disinfectant composition.

6. The method according to claim 2 wherein the weight of the alcohols, individually or in their mixture, is between 5 and 60 % by weight, referring to the total weight of the disinfectant composition.

7. The method according to claim 1 wherein the disinfectant composition further comprises between 1 and 8 % by weight of at least one sequestering agent selected from the group consisting of aminoacetic acids, phosphonic acids, their derivatives and mixtures thereof.

8. The method according to claim 1 wherein the antiviral combination is in an aqueous, dilute solution containing between 0.5 and 10 % by weight of the disinfectant composition.

9. The method according to claim 1 wherein the phenols are selected from the group consisting of 2-isopropyl-5-methylphenol, 2-, 3-, or 4-methylphenol, hexylresorcinol, 2-phenylphenol, 2-methoxyphenol, 3-methyl-4-chlorophenol, 3,5-dimethyl-4-chlorophenol, 2-benzyl-4-chlorophenol, and mixtures thereof.

10. The method according to claim 1 wherein the aromatic monohydroxycarboxylic acid is selected from the group consisting of 2-; 3-; 4-hydroxybenzoic acid and mixtures thereof.

11. The method according to claim 1 wherein the dihydroxybenzoic acids are selected from the group consisting of 2,3-; 2,4-; 2,5-; 2,6-; 3,4-; and 3,5-dihydroxybenzoic acid and mixtures thereof.

12. The method according to claim 1 wherein the trihydroxybenzoic acid is selected from the group consisting of 2,3,4-trihydroxybenzoic acid, 2,4,6-trihydroxybenzoic acid, 3,4,5-trihydroxybenzoic acid and mixtures thereof.

13. A method of preparing a product for use as a disinfectant for the control and inactivation of pathogenic germs comprising the steps of producing a mixture comprising:

an effective microbicidal and antiviral combination of

A) at least one acid selected from the group consisting of aromatic monohydroxycarboxylic acids, dihydroxybenzoic acids, trihydroxybenzoic acids and mixtures thereof,

B) phenols; and

C) one or more surfactants selected from the group consisting of

i) an anionic surfactant selected from the group consisting of alkyl sulfonates, alkyl aryl sulfonic acid, alkyl aryl sulfonates, alkyl aryl ether sulfates with 1 to 3 EO groups, alkyl ether sulfates with 1 to 3 EO groups, their sodium, potassium, and ammonium salts with primary or branched chains having a length of C_8 to C_{18} and mixtures thereof; and

ii) a nonionic surfactant selected from the group consisting of alkyl polyethyleneglycol ethers with 3 to 11 EO groups and mixtures thereof,

wherein the weight ratio of component (C) to components (B + A) is between 1 : 9 and 9 : 1, and their sum is between 10 and 60 %, referring to the total weight of the concentrated disinfectant formula.

14. The method according to claim 13, wherein the disinfectant composition further comprises at least one compound selected from the group consisting of:

a salt selected from the group consisting of butyl monoglycol sulfate, cumenesulfonate, toluenesulfonate, xylenesulfonate as sodium, potassium, or ammonium salt and mixtures thereof;

one or more aliphatic alcohols or glycols having a chain length of C_2 to C_{12}; and

a pH regulator comprising one or more aliphatic carboxylic acids or hydroxycarboxylic acids having a chain length of C_1 to C_6.

15. The method according to claim 13 wherein the weight ratio of component (A) to component (B) is between 1 : 9 and 9 : 1.

Cancel claim 16

17. The method according to claim 13 wherein the disinfectant composition further comprises between 1 and 8 % by weight of at least one sequestering agent.

18. The method according to claim 13 comprising the step of preparing an antiviral combination containing between 0.5 and 10 % by weight of the disinfectant composition.

19. The method according to claim 13 wherein the phenols are selected from the group consisting of 2-isopropyl-5-methylphenol, 2-, 3-, or 4-methylphenol, hexylresorcinol, 2-phenylphenol, 2-methoxyphenol, 3-methyl-4-chlorophenol, 3,5-dimethyl-4-chlorophenol, 2-benzyl-4-chlorophenol, and mixtures thereof.

20. The method according to claim 13 wherein the aromatic monohydroxycarboxylic acid is selected from the group consisting of 2-; 3-; 4-hydroxybenzoic acid and mixtures thereof.

21. The method according to claim 13 wherein the dihydroxybenzoic acids are selected from the group consisting of 2,3-; 2,4-; 2,5-; 2,6-; 3,4-; and 3,5-dihydroxybenzoic acid and mixtures thereof.

22. The method according to claim 13 wherein the trihydroxybenzoic acid is selected from the group consisting of 2,3,4-trihydroxybenzoic acid, 2,4,6-trihydroxybenzoic acid, 3,4,5-trihydroxybenzoic acid, and mixtures thereof.

Add new claim 23 as follows:

--A method for the control and inactivation of pathogenic germs on surfaces and instruments of medical and technical establishments comprising the step of contacting the surface or instrument with a disinfectant composition comprising:

an effective microbicidal and antiviral combination of

A) at least one acid selected from the group consisting of aromatic monohydroxycarboxylic acids, dihydroxybenzoic acids, trihydroxybenzoic acids and mixtures thereof,

B) phenols; and

C) one or more surfactants selected from the group consisting of

i) an anionic surfactant selected from the group consisting of alkyl sulfonates, alkyl aryl sulfonic acid, alkyl aryl sulfonates, alkyl aryl ether sulfates with 1 to 3 EO groups, alkyl ether sulfates with 1 to 3 EO groups, their sodium, potassium, and ammonium salts with primary or branched chains having a length of C_8 to C_{18} and mixtures thereof; and

ii) a nonionic surfactant selected from the group consisting of alkyl polyethyleneglycol ethers with 3 to 11 EO groups and mixtures thereof,

wherein the weight ratio of component (C) to components (B + A) is between 1 : 9 and 9 : 1, and their sum is between 5 and 40 %, referring to the total weight of the concentrated disinfectant formula.—

2. The following is an examiner's statement of reasons for allowance: Applicants have claimed a method according to claim 1 set forth above. The prior art does not teach this specific combination of components in the specific ratios and amounts presently claimed. Applicants have presented evidence that this specific combination and ratio results in a synergistic combination having enhanced antimicrobial properties. Accordingly, the present claims are allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles I. Boyer whose telephone number is 571 272 1311. The examiner can normally be reached on M-Th 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571 272 1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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